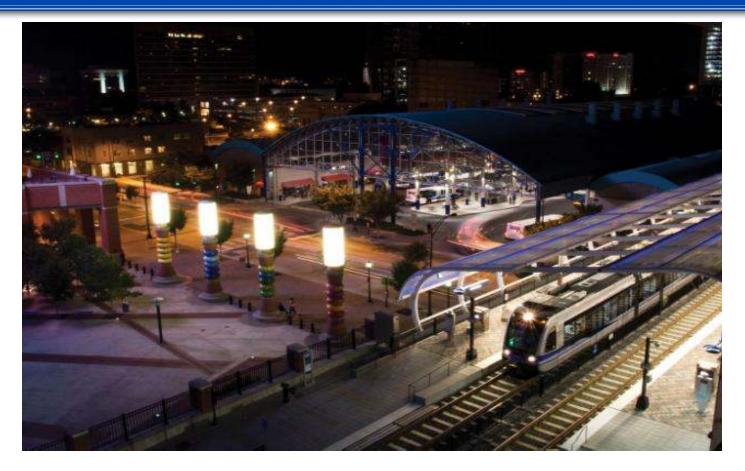


LYNX Blue Line Extension



Public Meeting January 12, 2011



MTC Direction

- Reduce Cost and Accelerate Schedule
 - Cut capital cost by 20%
 - Reduce annual operating and maintenance costs by 6.5%
 - Open project in 2016





Guiding Philosophy

- Maintain project goals:
 - Land Use Support the Region's Centers, Corridors & Wedges Growth Framework
 - Mobility Improve access & mobility in the corridor & region; Increase transit
 - Environment Preserve & protect the environment
 - Financial Develop affordable, cost-effective transportation solutions
 - System Integration Develop transportation improvements that function as part of a larger transportation system





Guiding Philosophy

Maintain flexibility for the future:

- Schedule Minimize potential BLE schedule delays (Environmental, Design, ROW, Construction)
- Easy to Add Later Cuts easiest to add later through adjacent development or other projects
- Equity Consistency between corridors and travel markets; preserve service to existing riders
- Safety & Reliability Safe and reliable transit system for patrons, employees and the public
- O & M Costs Extent to which capital cost reductions also facilitate achieving a 6.5% reduction in O & M Costs
- Lessons Learned maintain capacity, provide sufficient parking, accommodate special events, and protect safety items such as grade separations

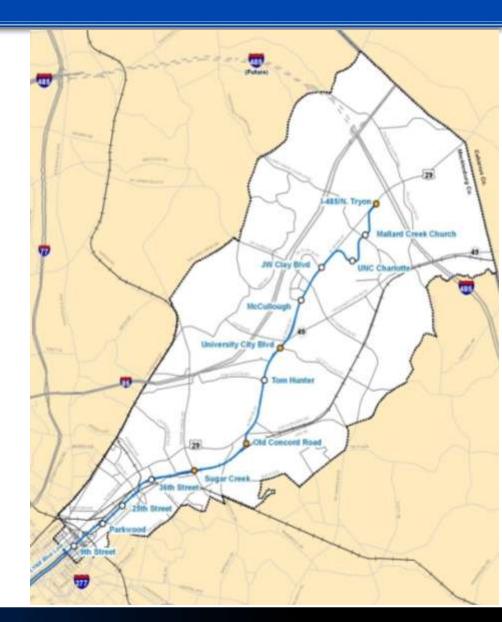






LYNX Blue Line Extension

- 30% Project Description
 - Extending from 7th Street to I-485 (10.6 miles)
 - 13 Stations: 9 walk-up & 4 park and ride (3 parking decks)
 - 12 at-grade crossings and 5 grade separations
 - Fleet size: 46 vehicles (South plus Northeast) operating two-car trains at six-minute headways
 - Includes second maintenance facility





General Categories Considered for Potential Cost Reductions

- Project Length: Don't extend all the way to I-485
- Parking: Surface lots versus decks, parking locations
- Vehicle Fleet Size: Evaluate operating scenarios and car requirements
- Vehicle Maintenance Facility: Re-evaluate minimum maintenance and storage needs
- Right-of-way requirements: Evaluate North Tryon Street cross-section
- Other: Miscellaneous smaller cost items



Project Length Considerations

- Ridership Impact UNC Charlotte is a major ridership generator
- Provision of sufficient parking
- Minimum project must meet purpose and need
- Types and magnitude of additional cost savings needed to offset extra length
- Preserve option to extend in future





Project Length Recommendation

Change Project Terminus to UNC Charlotte

- Estimated net savings is \$92 million
- Eliminates 1.1 miles of mostly bridge structure crossing wetlands including grade separation over Mallard Creek Church Road
- Most of I-485 ridership redistributes to other stations (JW Clay, McCullough and University City Blvd (UCB)) – revised ridership projections estimate approximately 90% of ridership will be retained.
- Reduces annual operating expenses by about 7 percent
- Retains \$40 million in budget to replace I-485 parking needs



Light Rail Vehicles

Current cost estimate includes purchase of 26 vehicles to provide 2-car trains @ 6 minute headways to I-485

- Shorter project length reduces fleet size by 4 vehicles
- Changing Operating Plan to 3-car trains @ 10 minute headways reduces fleet size by 4 vehicles
- Total Reduction is 8 vehicles for a savings of \$38 million





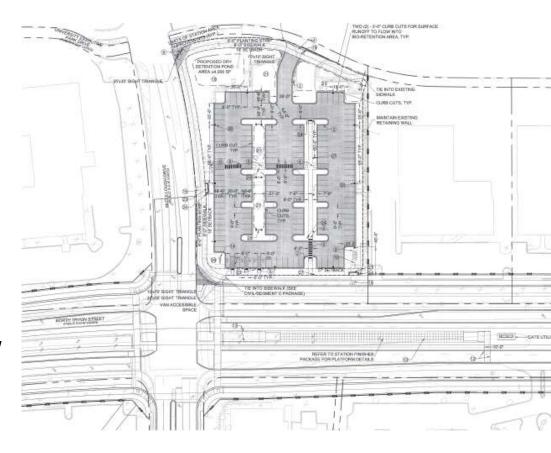
Shorter project eliminates I-485 station with 2000 parking spaces

- No parking at UNC Charlotte station due to impacts to campus traffic
- Ridership model indicates most I-485 parking would redistribute to JW Clay and/or McCullough, and University City Boulevard (Cost savings calculations assume \$40 million required to add parking at these stations)
- Sugar Creek station parking currently includes a deck, but the Draft EIS also evaluated three surface lots
- Delaying construction of deck at Sugar Creek saves approximately \$9 million



McCullough Park and Ride

- Previously eliminated and moved to UCB
- Elimination of I-485
 deck requires additional
 parking that cannot be
 provided by UCB
 station alone
- Ridership projections indicate lower demand for McCullough than JW Clay
- McCullough more expensive





JW Clay Parking - Option A

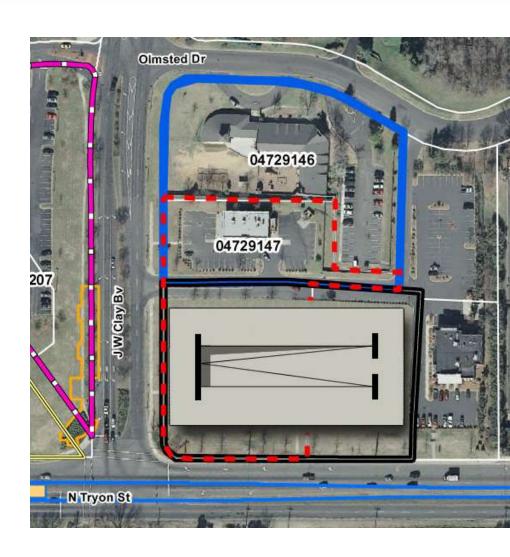
- Parking supply is 600 spaces
- Access off of JM Keynes Drive
- Some reconfiguration of property may allow for a more traditional deck
- Access to station only requires crossing Tryon Street
- Costs for Options A and B are similar





JW Clay Parking - Option B

- Parking supply 600 cars
- Easier access for cars
- Requires CATS
 customers to cross JW
 Clay and Tryon Street
 to access station
- May be more conducive to future development
- Requires purchasing existing businesses





University City Boulevard Parking

- Total parking spaces provided 1480 (600 additional)
- Increased traffic from parking requires lengthening turn lanes through the Weave
- Requires deck and surface lots

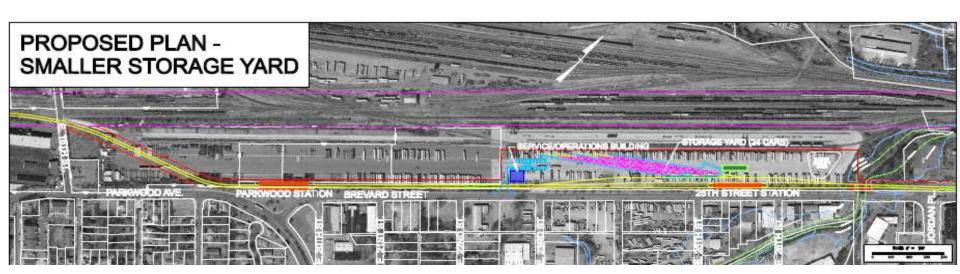




Vehicle Maintenance Facility Needs

Reducing the fleet size removes the need for a second maintenance facility and less storage area.

Reducing the planned facility at the NS Intermodal site to a small yard with minimal improvements to the facilities at the existing South Boulevard site saves \$26 million





BLE Right-of-Way Requirements

Project traverses multiple types of right-of-way

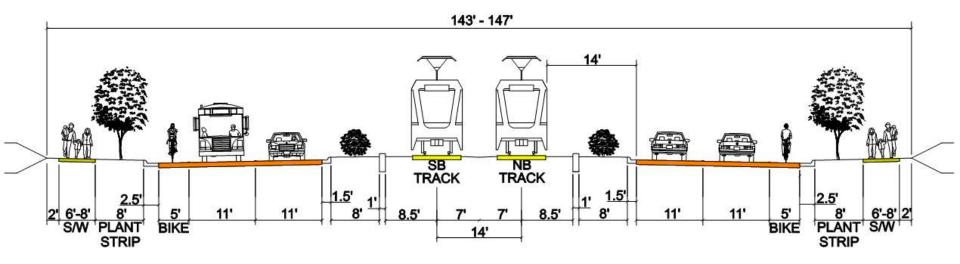
- North Carolina Railroad
- North Tryon Street between Old Concord Road and UNC Charlotte
- UNC Charlotte campus

Factors impacting right-of-way needs and costs

- Railroad ROW dictated by track separation requirements
- UNC Charlotte ROW will be made available at no cost
- Only opportunity to reduce ROW requirements is on North Tryon Street segment – Cost Savings \$52.6 million



North Tryon Street Typical Section



Benefits of full typical section

- Enhances connectivity to light rail stations
- Provides multi-modal facility accommodates bikes and pedestrians
- Satisfies adopted Urban Street Design Guidelines
- Consistent with improvements made in South Corridor (SCIP)
- Eligible for federal and state funds



BLE Right-of-Way Requirements - Recommendations

- Retain planned street cross-section as part of BLE project retain leverage of state and federal funds
- fund incremental ROW costs and new street improvements with local funds (NECI)
- reduces CATS financial contribution by \$11.25 million





Other Candidate Reductions

Other miscellaneous items still being evaluated

- Move all TVMs to platforms and reduce total by 25%
- Reduce the landscaping budget by 25%
- Reduce art budget commensurate with overall project reductions
- Eliminate crawl spaces under platforms

Items considered but not recommended

- Deferring/eliminating stations (25th, McCullough)
- Eliminating grade separations
- Two-car platforms



Summary of Potential Savings

In summary, the estimated net savings, in 2010 dollars, due to scope reductions are as follows:

End project @ UNC Charlotte \$ 92 million

Sugar Creek Parking modifications \$ 9 million

Reduce fleet size by 8 vehicles \$38 million

Reduce VMF needs \$ 26 million

Total Scope and Cost Reductions \$165 million

Reduction of "1/2 cent" contribution

due to reductions above \$41.25 million

Alternate funding of local share of

North Tryon improvements \$11.25 million

Total reduction of CATS "1/2 cent" share \$52.50 million



30% Cost Estimate

BLE 30% Design Cost Estimate

Base Year Estimate (2010): \$983 million

YOE Cost Estimate (2016): \$1.12 billion

"Affordable " BLE Approximate Cost Estimate

Base Year Estimate (2010): \$818 million

YOE Cost Estimate (2016): \$961 million



Strategic Decisions for the Future

- Maintains project purpose and need
- Maintains vision for North Tryon Street
- Retains majority of ridership still reaches UNC Charlotte which is a major ridership generator
- Keeps 3-car platforms and systems (South Corridor Lesson Learned)
- Provides ability to expand capacity by purchasing more vehicles and adding storage capacity
- Allows future extension to I-485 and Cabarrus County with primary parking at those locations



Projected Impact on FTA New Starts Process

Average Weekday Ridership

I-485 Terminus: 27,200 daily trips (6 minute headways)

UNC Charlotte Terminus: 24,500 daily trips (10 minute headways)

Cost Effectiveness

I-485 Terminus: Medium to Medium-High

UNC Charlotte Terminus: Similar

Overall Rating

• I-485 Terminus: Medium (2009)

UNC Charlotte Terminus: Should be similar, re-rating in fall 2011



Immediate Next Steps

- Revised Locally Preferred Alternative (LPA) to MTC for Action/Adoption on January 26, 2011
- Amend STV contract
- Re-evaluate project delivery method
- Prepare revised "Affordable" 30% cost estimate



Revised LYNX BLE Recommendations

- 7th Street to UNC-Charlotte (9.4 miles)
- 11 Stations 4 park and rides with parking decks at JW Clay and University City
- 38 vehicle fleet
- Small vehicle storage yard at intermodal site
- Minor capacity increase at existing VMF
- New Cost is \$961 million
- Opening date in late 2016







